Middle Years Assessment of Key Competencies in Mathematics, Reading Comprehension, Expository Writing, and Student Engagement

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MIDDLE YEARS ASSESSMENT OF KEY COMPETENCIES IN MATHEMATICS, READING COMPREHENSION, EXPOSITORY WRITING, AND STUDENT ENGAGEMENT

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CONTENTS

Rationale *1*

Purpose *3*

Pilot and development process *4*

Implementation *5*

Assessing Students *7*

Reporting Results *8*

References *9*

RATIONALE

Assessment of student performance is vital to guide the teaching-learning process. Research shows that both the quality and level of academic achievement and student engagement can be increased through formative assessment (assessment *for* and *as* learning[1]).

In classrooms where formative assessment refers to frequent, interactive assessments of student progress and understanding to identify learning needs and adjust teaching appropriately, the gains in student achievement are quite considerable (Organization for Economic Co-operation and Development [OECD], 2005; Black and Wiliam, 2005; Allal and Lopez, 2005; Wiggins, 1998).

This assessment *for* learning done by the teacher fosters an internal assessment *as* learning on the part of the student. To become independent learners, students need to participate in the assessment process. From the start, students need to construct for themselves an idea of what is to be learned. The teacher needs to explain the learning outcomes in terms that students understand, and to have them participate in setting criteria that define success, in giving and obtaining feedback, and in planning the next steps to reach the learning outcomes.

Depending on student needs, the teacher shows students how to carefully review and refine their work. Gradually, students learn to assess themselves and their peers fairly and realistically, being neither too harsh, nor too lax about the quality of the work.

Going beyond self-assessment, students must make the necessary adjustments to their work, and use the feedback gained from self-assessment, and from their peers and teacher. Students must be actively engaged in the teaching-learning process.

There is also a need to summarize information on the achievement of students (summative assessment or assessment *of* learning[2]) at certain points in time, to inform students, teachers, parents, and the broader educational community. This type of information can be used to adjust the teaching-learning process, and support the ongoing dialogue with parents.

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1 Manitoba Education, Citizenship and Youth. *Rethinking Classroom Assessment with Purpose in Mind, Assessment for Learning, Assessment as Learning, Assessment of Learning*. Winnipeg, MB: Manitoba Education, Citizenship and Youth, 2006.

2 Idem

The 2005 OECD study reports that parents who were given the opportunity to become familiar with alternate forms of reporting of their children's progress, such as through more extensive use of narratives and rubrics, found this helpful and informative, and gave them more guidance in how they might help their children with school work.

Summative information also provides feedback to the school or system so that appropriate supports for further learning are provided and serves to communicate achievement to stakeholders.

PURPOSE

The primary purpose of the policy is to enhance student learning and engagement through classroom-based assessment processes that build student awareness and confidence in learning. Formative assessment practices (assessment *for* and *as* learning) that engage students in setting learning goals and the criteria for success and that involve them in self-assessment and communicating about their progress, have great potential to improve learning.

The second purpose is to gather summative information about the levels of achievement in key areas that Middle Years students have attained by the end of January. These key areas are based on what most Manitobans regard as vital for all students—a reasonable level of reading, writing, number skills, as well as a reasonable level of student engagement. This Middle Years Assessment Initiative complements the Grade 3 Assessment project and the Senior 4 Standards Tests in providing a provincial picture of student achievement.

There are two distinct audiences for the summative information. One is the learning team consisting of the teacher, student, and parents. By collecting the information in January, it can be used to plan the specific next steps in the student's learning and support the ongoing dialogue with parents. The second audience is the school, school division/district and Department, which can use the information to look for trends and make decisions about the provision of resources that further support and enhance student learning.

PILOT AND DEVELOPMENT PROCESS

The Department has worked closely with the field in the development and piloting of the Middle Years Assessment policy. From January to April 2005, advisory committees composed of educators and department staff met several times to review the Middle Years Assessment policy and to develop the competencies in mathematics, reading and writing (in English and in French), and student engagement.

In May 2005 the Department recruited 75 schools from twenty school divisions to implement the policy on a pilot basis during the 2005–2006 school year to assist with the continued development of procedures and support materials. Department staff worked closely with pilot schools and teachers over the course of the assessment. As well, the department met twice with major stakeholder groups to discuss and review the policy. The current policy and procedures reflect information and feedback gathered from the various sources.

IMPLEMENTATION

This policy applies to all students in Grade 7 and Grade 8 in provincially funded schools. It is recognized that there is a range of student performance in classrooms. For students who have special learning needs related to a cognitive disability documented in an individualized educational plan (IEP), teachers are to check the IEP box and provide comments on the reporting form. In this situation, teachers are not required to report on the competencies.

Students who have exceptional needs that do not change the expected curricular outcomes (for example, a student who has a physical or behavioural difficulty) participate in the same assessment and reporting process as their peers.

Over a two-year period (see tables below), all school divisions/districts and funded independent schools in the province will implement this assessment policy in Grade 7 and Grade 8 classrooms. Non-funded and band-operated schools are invited to participate, and will have access to materials and training for this purpose.

The Department will provide a brochure for parents with information about this policy.

English Program

Key Competency	Mid-Grade 7	Mid-Grade 8	Implementation Year
Number Sense	✓		2006–2007
Application of Number Skills	✓		2006–2007
Student Engagement	✓		2007–2008
Reading Comprehension		✓	2007–2008
Writing of Expository Texts		✓	2006–2007

Français Program

Key Competency	Mid-Grade 7	Mid-Grade 8	Implementation Year
"Sens des nombres"	✓		2006–2007
"Habiletés mathématiques"	✓		2006–2007
"Engagement de l'élève"	✓		2007–2008
"Compréhension en Lecture"		✓	2006–2007
"Écriture de textes informatifs"		✓	2007–2008
Reading Comprehension (in English)		Optional	Optional
Writing of Expository Texts (in English)		Optional	Optional

French Immersion Program

Key Competency	Mid-Grade 7	Mid-Grade 8	Implementation Year
"Sens des nombres"	✓		2006–2007
"Habiletés mathématiques"	✓		2006–2007
"Engagement de l'élève"	✓		2007–2008
"Compréhension en Lecture"		✓	2006–2007
"Écriture de textes informatifs"		✓	2007–2008
Reading Comprehension (in English)		✓	2007–2008
Writing of Expository Texts (in English)		✓	2006–2007

ASSESSING STUDENTS

Formative Assessment

Throughout the year, it is important to incorporate formative (assessment *for* and *as* learning) practices in the daily life of the classroom. Together, teachers and students use assessment to set goals and the criteria for success, to plan and adjust the teaching-learning process, to provide descriptive feedback, and to observe and communicate progress.

To become independent learners, students need to be involved in the assessment process. This might begin with the teacher modeling strategies and providing specific descriptive feedback. The teacher might show students how to carefully review and refine their work as needed. Gradually, students learn to assess themselves and make the necessary adjustments to their work.

As part of this Middle Years Assessment Policy, students will gauge their own performance relative to the same criteria used by teachers. This is intended to engage students in their own learning and lead to discussions among students, parents, and teachers regarding learning and progress.

Summative Assessment

In the last two weeks of January[3], teachers prepare student reports showing each student's level of attainment on each of the identified key competencies. This assessment is based on the most recent, stable evidence of student achievement gathered as part of the normal teaching-learning process, and is made relative to mid-year criteria provided by the Department which are based on curricular, grade-level learning outcomes.

The assessment of student performance for this policy is not restricted to language arts and mathematics teachers, and may include input from teacher teams, especially for student engagement with school.

3 French immersion schools with a late immersion program can assess Grade 7 students in *Mathématiques* in the first two weeks of March.

REPORTING RESULTS

The Department will provide assessment criteria supported by rubrics, continua, and student examples, so that reported performance results are as reliable[4] and as valid[5] as possible.

Schools report each student's performance in two ways—to students and parents, distributed in a timely manner, and to the Department by the end of February[6]. Schools and school divisions/districts are to include an analysis of school/school division level results in their report to the community, along with appropriate contextual background information. To facilitate data reporting, the Department will provide some data analysis.

Schools use the reporting forms provided by the Department to communicate results to parents. Performance levels, supported by descriptors of competencies, are used for reporting mid-grade results. Schools will also use the reporting form for student engagement provided by the Department. Schools or school divisions wishing to incorporate reporting for this policy into other reporting procedures rather than using the provincial reporting templates must first obtain authorization from Manitoba Education, Citizenship and Youth.

Schools will report individual student results to the Department by the end of February. Information about this reporting process will be sent to all schools near the beginning of each school year.

The Department will publicly report results at the provincial and program levels by June of the school year, as well as address specific areas of interest and research. No departmental public reporting will permit the identification of a student, class, school, or school division/district.

The Department will make the data available to external research groups for educational research purposes, as appropriate.

4 Reliability refers to the degree to which reported results are dependable in the sense that they would be the same if carried out by a different teacher, and/or using different strategies.

5 Validity refers to the appropriateness of interpretations made of reported results such as students' performance levels. In the context of this policy, it will be crucial that assessment strategies (e.g., tools and strategies, performance descriptors, criteria) accurately reflect the identified key competencies (derived from curriculum documents) and evaluation guidelines.

6 Please note that French immersion schools with a late immersion program can report the Grade 7 *Mathématiques* results to the Department by the end of March.

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DRAFT

January, 20__

Provincial Report on Student Performance
Grade 7 Mathematics

Student's Name: _____

☐ Individual Education Plan

Competency **Number Sense** **Student has a conceptual understanding of number and of some of its representations.**	**Level of Performance**		
	Not Meeting **Mid-Grade 7 Level of Performance**	**Approaching** **Mid-Grade 7 Level of Performance**	**Meeting** **Mid-Grade 7 Level of Performance**
Student orders fractions.	☐ Orders fractions using pictures. E.g., 	☐ Connects picture representations of fractions to their symbols to order them. E.g., $\frac{1}{4}$ $\frac{1}{3}$ $\frac{1}{2}$ $\frac{3}{2}$ $\frac{5}{3}$	☐ Orders fractions in symbols. E.g., $\frac{1}{4}, \frac{1}{2}, \frac{7}{5}, 1\frac{1}{2}, \frac{11}{3}, 3\frac{3}{4}$
Student orders decimal numbers.	☐ Orders decimal numbers between 0 and 1, to three decimal places. E.g., 0.035, 0.305, 0.350	☐ Orders decimal numbers greater than 1, to three decimal places. E.g., 1.224, 1.334	☐ Orders numbers to any number of decimal places. E.g., 0.003 456, 0.034 004, 1.003 456
Student understands that a given number may be represented in a variety of ways. [Representations: pictorial, fraction, decimal, percent, ratio]	☐ Represents a given number in one other way. E.g., $\frac{1}{2} =$	☐ Represents a given number in two other ways. E.g., $\frac{1}{3} = 0.333...$ and $33\frac{1}{3}\%$	☐ Represents a given number in more than two other ways. E.g., $\frac{1}{4} = 0.25 = 25\% = 1:4 =$

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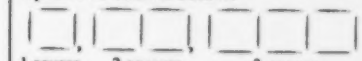
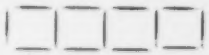
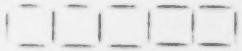
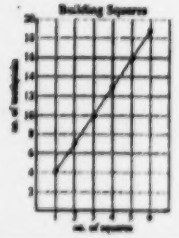
Competency	Level of Performance		
Number Skills **Student solves mathematical problems using knowledge of number patterns and mental math strategies.**	**Not Meeting** **Mid-Grade 7 Level of Performance**	**Approaching** **Mid-Grade 7 Level of Performance**	**Meeting** **Mid-Grade 7 Level of Performance**
Student uses number patterns to solve mathematical problems. E.g., Toothpicks are used to build squares as shown below.  1 square 2 squares 3 squares How many toothpicks are needed to build 51 squares?	☐ In a problem-solving context, represents, recognizes, constructs, and extends patterns; uses materials, pictures or numbers, develops a chart or table to record and extend patterns. E.g.,  4 squares  5 squares 	no. of squares	no. of toothpicks
---	---
1	4
2	7
3	10
4	13
5	16
6	19		☐ Models patterns on graphs and describes (in everyday language) a rule to reflect and extend patterns. E.g., Add three toothpicks to form the next square. or You start with 1 toothpick and add 3 for every square.  	☐ Writes an algebraic expression for number patterns to solve problems. E.g., Let n = number of squares and t = number of toothpicks $t = 3n + 1$ $t = 3(51) + 1$ $t = 153 + 1$ $t = 154$
Student uses a variety of strategies to calculate and explain a mental math problem. E.g., Add 372 + 489. [Strategies such as skip counting, decomposition and regrouping (associative property), compatible numbers, starting from known facts, compensation, using the opposite operation, place value, commutative property, distributive property.]	☐ Uses paper and pencil methods to make mental calculations. E.g., $^{1}3^{1}72$ $+\ 489$ 861	☐ Solves using only one strategy and explains the reasoning. E.g., 372 + 489 300 + 400 + 70 + 80 + 9 + 2 — expanded and reorganized 700 + 150 + 11 — added in pairs 861 — added what's left	☐ Chooses among a variety of strategies to make mental calculations, adapts strategies according to different situations and explains the reasoning. E.g., 372 + 489 489 + 300 = 789 (added 300) 789 + 11 (nearest 100) 800 + 61 (72 - 11 = 61 remains to be added) 861

Teacher Comment (Optional)

Teacher Signature

Student Reflection and Goal Setting (Optional)

January, 20__

DRAFT

Provincial Report on Student Performance
Grade 8 English Language Arts
Reading Comprehension

Student's Name: _____

☐ Individual Education Plan

Competency **Student comprehends a variety of grade level texts (fiction and non-fiction).**	**Level of Performance**		
	Not Meeting **Mid Grade 8 Level of Performance**	**Approaching** **Mid Grade 8 Level of Performance**	**Meeting** **Mid Grade 8 Level of Performance**
Student understands key ideas and messages in a variety of texts.	☐ Demonstrates a limited understanding of key ideas and messages.	☐ Understands key ideas and messages more easily in some texts than in others.	☐ Understands key ideas and messages in familiar and unfamiliar texts.
Student interprets a variety of texts.	☐ Demonstrates a limited ability to draw conclusions or make connections between texts and prior knowledge.	☐ Interprets texts, with familiar content or forms, by connecting with prior knowledge to make inferences and draw conclusions.	☐ Interprets a variety of texts by connecting reading with prior knowledge to make inferences and draw conclusions.
Student responds critically to a variety of texts.	☐ Expresses personal opinions with limited support from texts and other sources.	☐ Develops own ideas and point of view with some support from texts.	☐ Selects and integrates information, ideas, and points of view from texts and other sources to expand and support thinking.

Teacher Comment (Optional)	**Student Reflection and Goal Setting (Optional)**
_____ **Teacher Signature**	

January, 20_ _

DRAFT

Provincial Report on Student Performance
Grade 8 English Language Arts
Expository Writing

Student's Name: _____

☐ Individual Education Plan

Competency **Student writes expository texts for a variety of audiences and purposes (to inform, describe, explain, persuade, state an opinion, etc.).**	Level of Performance		
	Not Meeting **Mid Grade 8 Level of Performance**	**Approaching** **Mid Grade 8 Level of Performance**	**Meeting** **Mid Grade 8 Level of Performance**
Student generates, selects, and organizes ideas to support the reader's understanding.	☐ Ideas are undeveloped or off topic; no overall organization (opening, body, conclusions) is employed.	☐ Ideas are adequate and on topic; overall organization is evident; inconsistent organization of supporting details.	☐ Ideas are on topic and well developed; organization of details supports readers' understanding.
Student chooses language (word choices and sentence patterns) to have an impact on the reader.	☐ Word choices and sentence patterns result in little or no impact on the reader.	☐ Word choices and sentence patterns have some impact on the reader.	☐ Word choices and sentence patterns have a definite impact on the reader.
Student uses conventions (spelling, grammar, and/or punctuation) and resources (spell-checker, thesauruses, dictionaries, etc.) to edit and proofread to make meaning clear.	☐ Frequent spelling and grammatical errors detract from the understanding of texts.	☐ Errors in use of conventions detract from overall impression, but the meaning is evident.	☐ Conventions are applied consistently; errors may exist but do not affect meaning or overall impact.

Teacher Comment (Optional)	**Student Reflections and Goals (Optional)**
_____ **Teacher Signature**	

January, 20__

Provincial Report on Student Performance
Grade 7 Student Engagement
English Program

Student's Name: _____

☐ Individual Education Plan

Competency Some indicators of student engagement are	Level of Performance				
	Emerging	Developing	Established	OR	Inconsistent
Demonstrating an interest in his/her learning (discussing work with peers or teacher, pursuing learning goals, showing an interest in independent research or learning, "going beyond" the assignment/extending his/her learning, working with enthusiasm, etc.)	☐	☐	☐		☐
Engaging in self-assessment (comparing work to assignment criteria or an exemplar to see if it can be improved; proofreading, revising, comparing current work with past work, using a portfolio process for this purpose, etc.)	☐	☐	☐		☐
Being aware of learning goals of a unit of study and/or personal learning goals (participating in discussions/activities, identifying goals, using self-reports/journal entries/portfolios, student led conference(s), student-teacher conversations, etc.)	☐	☐	☐		☐
Participating in lessons (listening, questioning, sharing with peers, engaging with activities related to the lesson, etc.)	☐	☐	☐		☐
Accepting responsibility for assignments (handing in assignments on time, completing work in class when assigned, meeting assignment criteria, etc.)	☐	☐	☐		☐

Teacher Comment (Optional)	Student Reflection and Goal Setting (Optional)
_____ Teacher Signature	